

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Withdrawn) A method for manufacturing a substrate for forming a patterned thin film by applying a fluid, comprising the steps of:

forming a paraffin layer by applying a paraffin coating to a base that exhibits an affinity to the fluid; and

removing said paraffin layer by supplying energy to a region to be an affinity region having an affinity to said fluid such that said affinity region and a non-affinity region not having an affinity to said fluid are formed in a pattern formation region in which said patterned thin film is formed.

2. (Withdrawn) A method for manufacturing a substrate for forming a patterned thin film by applying a fluid, comprising the steps of:

forming a paraffin layer by applying a paraffin coating to a base that exhibits no affinity to the fluid;

removing said paraffin layer by supplying energy to a region to be a non-affinity region not having an affinity to said fluid such that an affinity region having an affinity to said fluid and said non-affinity region are formed in a pattern formation region in which said patterned thin film is formed; and

removing said paraffin layer by supplying energy to a region to be a pattern non-formation region in which a patterned thin film is not formed.

3. (Currently Amended) A method for manufacturing a substrate ~~for forming a patterned thin film by applying a fluid~~, comprising the steps of:

forming a metal layer on a base ~~that exhibits an affinity to the fluid~~;

removing a part of said the metal layer by supplying energy ~~to a region to be an affinity region having an affinity to said fluid such that said affinity region and a non-affinity region not having an affinity to said fluid are formed in a pattern formation region in which said patterned thin film is formed~~ to form a pattern non-formation region comprised of a metal layer pattern non-formed region and a pattern formation region comprised of a metal layer pattern formed region and a base exposed region; and

forming a sulfur compound film on the metal layer pattern unformed region and the metal layer pattern formed region by immersing said the base from which the metal has been selectively removed in a mixed-liquid containing a sulfur compound; and

forming a thin film pattern on the pattern formation region by applying a fluid to the pattern formation region that exhibits a non-affinity to the sulfur compound film and an affinity to the base.

4. (Currently Amended) A method for manufacturing a substrate ~~for forming a patterned thin film by applying a fluid~~, comprising the steps of:

forming a metal layer on a base that exhibits no affinity to ~~the~~ a fluid;

removing ~~said first portions of the~~ metal layer by supplying energy to the first region ~~regions of the base other than the pattern formation region in which said patterned thin film is formed~~;

removing ~~said second portions of the~~ metal layer by supplying energy to the second regions of the base ~~to a region to be a non-affinity region not having an affinity to said fluid such that an affinity region regions having an affinity to said the fluid and said non-affinity region regions are formed in said pattern formation region~~ the second regions; and

immersing ~~said the base from which the metal has been selectively removed~~ in a ~~mixed~~-liquid containing a sulfur compound.

5. (Canceled)

6. (Withdrawn) A method for manufacturing a substrate for forming a patterned thin film by applying a fluid, comprising the steps of:

masking a base that exhibits no affinity to the fluid with a mesh mask that covers the region other than a pattern formation region in which said patterned thin film is formed and also covers a non-affinity region not having an affinity to said fluid such that an affinity region having an affinity to said fluid and said non-affinity region are formed in said pattern formation region;

plasma-working said base covered with the mesh mask; and

performing a modification treatment on the base surface that has been excited by said plasma working.

7. (Withdrawn) A method for manufacturing a substrate for forming a patterned thin film by applying a fluid, comprising the steps of:

masking a base that exhibits an affinity to the fluid with a mesh mask that covers an affinity region having an affinity to said fluid such that said affinity region and a non-affinity region not having an affinity to said fluid are formed in a pattern formation region in which said patterned thin film is formed;

plasma-working said base covered with the mesh mask; and

performing a modification treatment on the base surface that has been excited by said plasma working.

8. (Withdrawn) A method for manufacturing a substrate for forming a patterned thin film by applying a fluid, comprising the steps of:

masking a base that exhibits no affinity to the fluid with a mesh mask that covers the region other than a pattern formation region in which said patterned thin film is formed and also covers a non-affinity region not having an affinity to said fluid such that an affinity region having an affinity to said fluid is formed within said non-affinity region in said pattern formation region; and

performing a modification treatment on said mesh-masked base by irradiating it with ultraviolet rays.

9. (Withdrawn) A method for manufacturing a substrate for forming a patterned thin film by applying a fluid, comprising the steps of:

masking a base that exhibits an affinity to the fluid with a mesh mask that covers an affinity region having an affinity to said fluid such that said affinity region and a non-affinity region not having an affinity to said fluid are formed in a pattern formation region in which said patterned thin film is formed; and

performing a modification treatment on said mesh-masked base by irradiating it with ultraviolet rays.

10. (Withdrawn) A method for manufacturing a substrate for forming a patterned thin film by applying a fluid, comprising the steps of:

forming a thin film from a thin film material having an affinity to said fluid on a base furnished with a surface not having an affinity to the fluid;

providing a photoresist such that an affinity region having an affinity to said fluid and a non-affinity region not having an affinity to said fluid are formed in a pattern formation region in which said patterned thin film is formed; and

etching the base on which said photoresist has been formed and etching the region other than the region where said photoresist is provided.

11. (Withdrawn) A method for manufacturing a substrate for forming a patterned thin film by applying a fluid, comprising the steps of:

forming a thin film from a thin film material not having an affinity to said fluid on a base furnished with a surface having an affinity to the fluid;

providing a photoresist that covers the region other than a pattern formation region for forming said patterned thin film and also covers a non-affinity region not having an affinity to said fluid such that an affinity region having an affinity to said fluid and said non-affinity region are formed in said pattern formation region; and

etching the base on which said photoresist has been formed and etching the region other than the region where said photoresist is provided.

12. (Withdrawn) A method for manufacturing a substrate for forming a patterned thin film by applying a fluid, comprising the steps of:

applying a charge to the entire surface of a base that exhibits no affinity to the fluid;

dissipating the charge by applying energy to the region other than a pattern formation region in which said patterned thin film is formed;

dissipating the charge of a non-affinity region not having an affinity to said fluid such that an affinity region having an affinity to said fluid and said non-affinity region are formed in said pattern formation region; and

bonding a specific substance to the affinity region where the charge was not dissipated.

13. (Withdrawn) A method for manufacturing a substrate for forming a patterned thin film by applying a fluid, comprising the steps of:

applying a charge to the entire surface of a base that exhibits an affinity to the fluid;

dissipating the charge of an affinity region having an affinity to said fluid such that said affinity region and a non-affinity region not having an affinity to said fluid are formed in a pattern formation region in which said patterned thin film is formed; and

bonding a substance to the affinity region where the charge was not dissipated.

14. (Withdrawn) A method for manufacturing a substrate for forming a patterned thin film by applying a fluid, comprising the step of:

printing an affinity film in an affinity region having an affinity to said fluid such that said affinity region and a non-affinity region not having an affinity to said fluid are formed in a pattern formation region in which said patterned thin film is formed on a base that exhibits no affinity to the fluid.

15. (Withdrawn) A method for manufacturing a substrate for forming a patterned thin film by applying a fluid, comprising the step of:

printing a non-affinity film in the region other than a pattern formation region in which said patterned thin film is formed and in a disposed affinity region having an affinity to said fluid such that said affinity region and a non-affinity region not having an affinity to said fluid are formed in said pattern formation region on a base that exhibits an affinity to the fluid.

16. (Withdrawn) A method of manufacturing a substrate, comprising:

forming a pattern formation region including a plurality of affinity regions, each having an affinity to a fluid and at least one non-affinity region not having an affinity to said fluid on a base;

wherein said affinity region and said non-affinity region are formed such that the fluid is applied continuously to said affinity region and said non-affinity region between at least two of said affinity regions.

17. (Withdrawn) A method of pattern formation whereby a pattern is formed on a substrate, comprising the steps of:

driving an ink-jet type recording head which is able to discharge liquid droplets of said fluid in accordance with a optional pattern, and

forming a pattern with said fluid on said substrate by discharging liquid droplets of said fluid from the nozzles of said ink-jet recording head which is moving along said pattern,

wherein the substrate comprises at least one pattern formation region having a shape corresponding to the patterned film, and said pattern formation region being constituted by an affinity region having an affinity to the fluid and a non-affinity region not having an affinity to the fluid.

18. (Withdrawn) A method of pattern formation as claimed in claim 17, wherein the formation of said pattern is achieved by discharging liquid droplets of said fluid from said nozzles by:

supplying said fluid to the cavities which are established in said ink-jet type recording head and which are constructed in such a way that they can be filled with said fluid, and

applying a voltage corresponding to the optional pattern to piezoelectric elements which are assembled in such a way that they produce a change in the volume of said cavities.

19. (New) A method for manufacturing a substrate, comprising the steps of:

forming a metal layer on a base;

removing a part of the metal layer by supplying energy to form a pattern non-formation region comprised of a base layer pattern non-formed region and a pattern formation region comprised of a metal layer formed region and the base layer pattern formed region,

forming a sulfur compound film on the metal layer formed region by immersing the base in a liquid containing a sulfur compound; and forming a thin film pattern on the pattern formation region by applying the fluid to the pattern formation region that exhibits an affinity to the sulfur compound film and a non-affinity to the base.